

ART. IV.—*Termites (Isoptera) from South Sea and Torres Strait Islands.*

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[Read 13th May, 1926.]

The following notes and descriptions refer to a collection of Termites made by Mr. A. M. Lea during his entomological investigations in the South Sea and Torres Strait Islands in 1924.

Of the five species, representing three genera, obtained in Fiji, two are proposed as new, one is referred to a well-known Samoan species, one to a recently described (MS.) species contained in Dr. Buxton's Samoan collection, and one is indeterminable. So far as I am aware, there are no published records of Termites from Fiji. A number of immature *Calotermes* were obtained by Mr. Lea in New Caledonia, from which locality three species have been described previously (Holmgren, 1915). Rennel and Murray Islands, from which no Termites have been recorded previously, yielded one species of *Prorhinotermes* and one species of *Microcerotermes* respectively. The former is closely related to, if not identical with, the Samoan species *P. inopinatus* Silv., whilst the latter appears to be conspecific with a North Queensland species, the description of which is in course of publication in *Memoirs of the National Museum, Melbourne*. In each case the material is not sufficiently complete to enable a definite identification to be made.

The types of the new species and examples of the others are in the South Australian Museum; paratypes are in the National Museum, Melbourne.

CALOTERMES (?GLYPTOTERMES) TAVEUNIENSIS, n. sp.

Soldier.

Colour.—Head dark chestnut-brown, mandibles dark ferruginous, labrum, antennae, pronotum and legs buckthorn-brown, irons darker than labrum, but distinctly paler than remainder of head.

Head.—Long and narrow, parallel on the sides, broadly rounded behind; anterodorsal margin, except in middle, slightly elevated, frons concave and sloping to the base of the clypeus at an angle of 45 degrees; anterior one-third of head including frons and clypeus finely shagreened, remainder glabrous, with very scanty moderately large setae. Clypeus large, truncate in

front, anterior half pale in colour, with a row of four setae. Labrum large, extending more than half way to the apex of the mandibles, convex and widest in middle, rounded at apex, with narrow impressed margin and a group of nine to twelve stout setae on anterior half. Antennae short and stout, extending very little beyond apex of mandibles, 10-jointed; 1st joint short and stout; 2nd about half as long as 1st, not much longer than wide; 3rd a little longer than 2nd, and narrower at base; 4th a little longer and stouter than 3rd; 5th to 9th a little longer than 4th and narrower at base, markedly swollen at apex; 10th much shorter and narrower than 9th. Gula long and narrow, with impressed lateral margins, the posterior half parallel-sided, widest part at anterior third, where it is a little less than two-thirds wider than narrowest part.

Pronotum.—Short and wide, as wide as head, broadly concave in front, narrowed slightly on the sides to the broad and faintly sinuate posterior margin, clothed with very scanty setae.

Legs.—Short and comparatively slender, with very few setae; claws small; spurs small and not serrate.

Abdomen.—Long and narrowed to the apex, the tergites with an apical fringe of minute pale setae and with very few long setae elsewhere.

Measurements.—

	mm.
Total length - - - - -	4.90 — 5.10
Head, with mandibles, long - - -	2.22 — 2.33
Head, without mandibles, long - -	1.65 — 1.71
Head, wide - - - - -	0.93
Head, deep - - - - -	0.85
Gula, at narrowest part, wide - -	0.45 — 0.57
Pronotum, long 0.51; wide - - -	0.91 — 0.97
Tibia iii. long - - - - -	0.68

Locality.—Fiji: Taveuni.

Described from three soldiers and several larvae; collected in May.

Allied Species.—Differs from *C. (?G.) perangustus* Hill (1926), *inter alia*, in having a much darker, smaller, and more setaceous head, relatively long and narrow labrum, different frons and reddish mandibles.

CALOTERMES (CALOTERMES) REPANDUS Hill (MS.).

Mem. Nat. Mus. Melb., No. 7 (In Press).

A small colony comprising one dealated imago and several soldiers and workers, from Taveuni, Fiji, agrees very closely with the above species from Samoa. So far as comparison is possible, the imago differs only in its smaller size. The soldiers also agree very closely with the smaller examples of the Samoan species, from which they differ in having the head slightly darker and very little more setaceous, and the antennae 12- to 16-jointed

(13- to 15-jointed in *C. repandus*), As in the latter, some examples have the joints beyond the 5th or 6th relatively shorter and stouter than in others. The 3rd joint is not so well developed as in typical *Calotermes*, s. str., but it is more developed than is the case in any species of the sub-genus *Ncotermes* known to the writer. Until more material is available for examination there would appear to be no reason to regard the Fijian insect as being distinct from the Samoan form.

Measurements of soldier—

Head, with mandibles, long	-	-	-	-	-	mm.	4.00
Head, without mandibles, long	-	-	-	-	-		2.56
Head, wide	-	-	-	-	-		1.71
Pronotum, long	1.14;	wide	-	-	-		1.71

CALOTERMES (CRYPTOTERMES) ? sp.

Two damaged alate imagos from Viti Levu, Fiji (April) are very closely allied to *C. primus* Hill (from Townsville, N.Q.). The specific differences between imagos of the sub-genus *Cryptotermes* with markedly different soldiers are often difficult to detect.

CALOTERMES ? sp.

A series of larvae only from Noumea, New Caledonia, may be referable to one of the three species described by Drs. K. and N. Holmgren, in 1915, namely *C. rouxi*, *C. sarasini* and *C. canalensis*.

PRORHINOTERMES ? INOPINATUS Silvestri.

Die Fauna Südwest-Australiens, ii., 1909.

Soldiers and workers from Taveuni, Fiji, appear to be quite typical of the species originally described by Silvestri from Samoa, and more recently recorded from the Ellice Group (Hill, 1926). To the same, or a very closely allied, species also belongs a small colony found in a log on the beach on Rennel Island, Torres Strait. The soldier in this colony agrees with certain small sized examples in colonies collected recently by Dr. P. A. Buxton in the type locality, but the apterous adult king and queen differ from typical forms in their smaller size and paler colour, and in having a few very long setae on the thorax, and conspicuously long setae on each tergite of the abdomen. Until alate imagos are examined it cannot be stated whether these differences are specific or not. The genus comprises thirteen described species, all of which are more or less closely related and confined almost entirely in their distribution to islands within tropical and sub-tropical waters. Apart from the records referred to above, the only other references to the genus in the Australian Region is that of Snyder (1925), who described *P.*

manni and *P. solomonensis* from Santa Cruz Archipelago and Solomon Islands respectively. Both species are described in the soldier caste only, and are evidently closely allied to Silvestri's species. Many additional species or varieties will doubtless be discovered in the South Pacific Islands since their mode of life offers a ready means of dispersal by ocean currents.

EUTERMES OLIDUS, n. sp.

Soldier.

Colour.—Head and antennae hazel, rostrum and anterior half of pronotum chestnut, remainder of thorax and tergites of abdomen buckthorn-brown, legs somewhat paler.

Head.—Moderately short and deep, widest at posterior one-third and very little narrowed to the base of rostrum, the posterior half hemispherical in dorsal aspect, clothed with many rather short and stout reddish setae; rostrum a little less than one-third of the total length of head, wide at base. Antennae 13- or 14-jointed; 1st joint twice as long as wide, cylindrical; 2nd half as long as 1st, slightly narrowed at base; 3rd as long as 2nd but narrower; 4th to 6th equal, longer than 2nd and 3rd, or 3rd and 4th closely fused, the organ then appearing as 13-jointed, with 2nd joint shortest of all; 7th to 10th long and narrow, longer than 6th; 11th to 13th a little shorter than 7th to 10th; 14th as long as 13th, widest in middle, bluntly rounded at apex.

Pronotum.—Small, the anterior half bent up sharply, narrowed and deeply emarginate in the middle, the anterolateral angles narrowed, the sides sloping acutely to the obscurely emarginate posterior margin, the surface clothed moderately densely with long setae, as on abdomen.

Legs.—Of moderate length and stoutness, very setaceous.

Measurements.—

	mm.
Total length - - - - -	3.50 — 4.50
Head, long - - - - -	1.60 — 1.70
Head, wide - - - - -	1.08
Head, deep - - - - -	0.74
Antennae, long - - - - -	1.80
Pronotum, long, 0.25—0.28; wide - -	0.61
Tibia iii, long - - - - -	1.31

Worker.

Colour.—Head tawny-olive, somewhat paler on the sides and with large russet areas above on either side of the frontal suture; frontal and transverse sutures distinct, pale in colour; frons suffused with russet.

Head.—Large, a little longer than wide, widest across the middle, with rather scanty short setae; frons with a distinct impression on either side of the median line about midway between the transverse and clypeofrontal sutures. Postclypeus same

colour as sides of head, small, about twice as wide as long, strongly convex, without distinct median suture, with three large and many minute setae on each side, the hindermost in the middle, the anteriormost in the anterolateral corner, and the third and smallest close to the latter on the inner side; anteclypeus nearly as long as postclypeus, markedly lengthened in the middle, a dark castaneous spot at the articulation of the mandibles. Labrum small, narrowest at base, widening to the anterior one-fourth, broadly rounded in front. Antennae 15-jointed; 1st and 2nd joints as in soldier; 3rd shortest and narrowest of all; 4th a little longer and wider than 5th; 3rd-6th usually more or less fused.

Pronotum.—As in soldier excepting that it is of uniform colour.

Legs.—Moderately long and slender.

Abdomen.—Large, moderately setaceous.

Measurements.—

	mm.
Total length - - - - -	6.00
Head, to apex of labrum, long - - - -	1.82
Head, to clypeofrontal suture, long - - -	1.08
Head, wide - - - - -	1.53
Antennae, long - - - - -	1.70
Pronotum, long, 0.45; wide - - - - -	0.80
Tibia iii, long - - - - -	1.60

Locality.—Fiji: Taveuni. Lea's No. 20844.

Allied Species.—The soldier appears to resemble most closely the Northern Territory species *E. longipennis* Hill, from which it is easily distinguished by its shorter rostrum, more setaceous head, thorax and body, longer 3rd antennal joint and deeply emarginate pronotum.

MICROCEROTERMES ? TAYLORI Hill (MS.).

Mem. Nat. Mus., Melb., No. 7 (in Press).

A few soldiers and workers of a small species of *Microcerotermes*, from Murray Island, Torres Strait, agree very closely with the above species (from North Queensland). Imagos are required for confirmation of this identification.

REFERENCES.

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